IAF SPACE EXPLORATION SYMPOSIUM (A3) Interactive Presentations - IAF SPACE EXPLORATION SYMPOSIUM (IP)

Author: Dr. Melissa Sampson Ball Aerospace, United States, melissa@melissasampson.com

CISLUNAR1000: VISION FOR 2018-2035

Abstract

Cislunar1000 is United Launch Alliance's (ULA) vision for a self-sustaining space economy. Over the next thirty years, the global community of science, exploration, and industry can, and should, develop and capitalize cislunar space. There are vast natural resources, e.g. water, carbon, regolith, and microgravity, which will enable the commercialization of the space between the Earth and the moon, including the moon's surface.

This new frontier is imploring us to explore and broaden our boundaries. Prior research in LEO and on the moon builds the foundation for this audacious vision. The vision is global and can be achieved through public-private partnerships and infrastructure creation. ULA's interest and contributions are in infrastructure. Specifically, ULA's recent innovations will provide transportation between all points in cislunar space.

This paper will describe the details and actions required to achieve the Cislunar1000 vision for humanity. Timelines and technology roadmaps will be discussed, as well as opportunities for future research.